



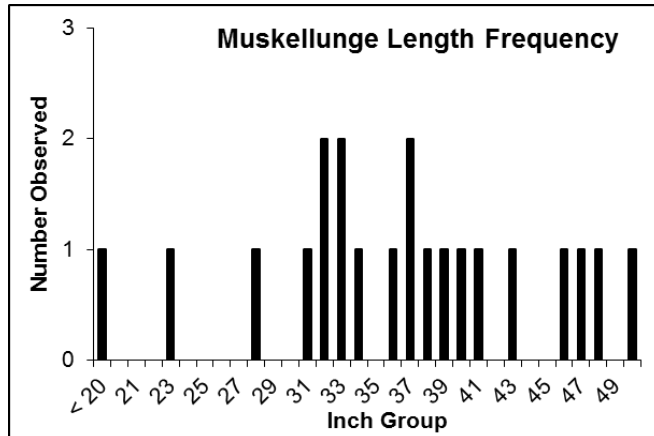
WISCONSIN DNR
FISHERIES INFORMATION SHEET

LAKE: Lily Lake

COUNTY: Forest

YEAR: 2016

The Wisconsin Department of Natural Resources is conducting a two-year (2016-17) comprehensive survey of Lily Lake, Forest County, to analyze the health of its fishery. Lily Lake is located approximately 10 miles south of Crandon, with boat access off of Lily Lake Road. Lily Lake covers 211 acres and achieves a maximum depth of 25 feet.



* Note: Adult muskellunge are defined as all sexually mature fish and all fish of unknown sex ≥ 30 inches long.

Muskellunge



The 2016 survey started with a fyke net survey for muskellunge from 4/27-5/6/2016. During this survey a total of 7 muskellunge were captured. Five electrofishing surveys were conducted between 5/2 and 6/1, during which 13 more muskellunge were captured. One additional muskellunge was captured during the late spring pan fish survey.

All muskellunge captured during 2016 were marked with a fin clip and internal tag. Another sample of muskellunge will occur in 2017, during the 2017 survey we will use the ratio of new fish to previously captured fish to estimate the abundance of muskellunge in Lily Lake.

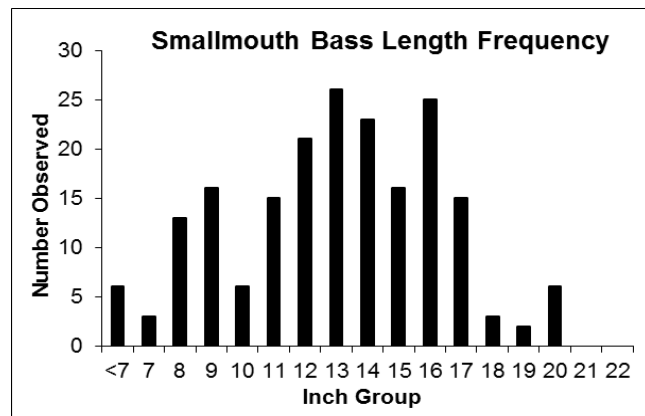
Every muskellunge captured during 2016 was measured to assess size structure. These fish ranged from 18 to 50 inches in length. The size structure of the fish sampled during 2016 was very good with 35% of the fish sampled over 20 inches being ≥ 40 inches, and 20% ≥ 45 inches.

Smallmouth Bass

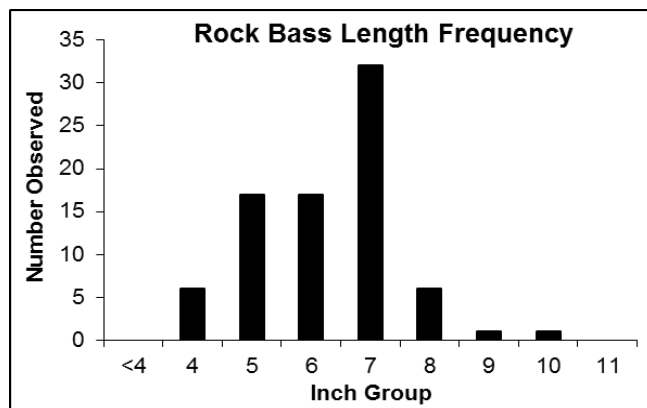


Smallmouth bass were captured during our spring fyke net survey and 4 spring electrofishing surveys from 5/2 to 5/18. During these surveys a total of 143 different smallmouth bass were given an identifiable fin clip. These fish were allowed to mix back into the population before we conducted our "recapture" surveys on 5/25 and 6/1. During the recapture survey a total of 70 different smallmouth bass were captured, with 26 fish bearing the fin clip given during the "marking" survey. The data obtained from our bass surveys estimate the smallmouth bass population (≥ 8.0 inches) to be approximately 398 fish, with a 95% confidence range of 257-539 fish. At approximately 1.9 adults/acre this is considered a moderate abundance of smallmouth bass.

A total of 196 different Smallmouth bass were captured and measured to assess the size structure of the population. The size structure of smallmouth bass in Lily Lake is very good with approximately 47.4% of the smallmouth bass captured being ≥ 14 inches and 3.2% ≥ 20 inches.



* Note: Adult bass are defined as all bass ≥ 8 inches long.



Rock Bass



Fyke nets were used to capture summer spawning panfish from 6/8-10/2016. Rock bass were the most abundant panfish species during this survey, with a relative abundance of 12.0 fish/net-night. This data indicates that rock bass are quite abundant in Lily Lake when compared to other lakes in this region.

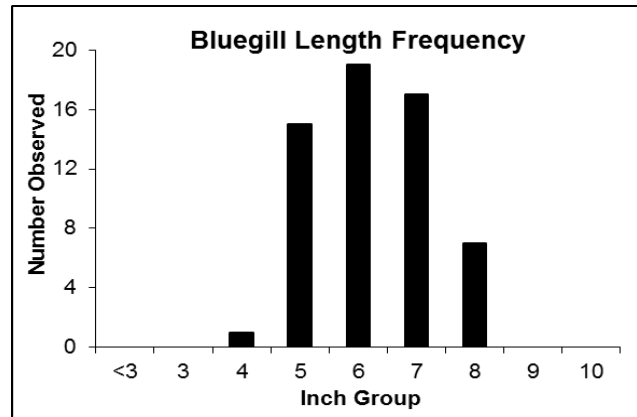
A random sample of 80 rock bass were measured to assess size structure. The size structure of this rock bass population is considered average with 50% of the fish sampled being ≥ 7 inches.

Bluegill



Bluegill were the 2nd most abundant panfish captured during our June fyke net survey with a relative abundance of 6.3 fish/net-night. This relative abundance suggests that the bluegill population is of low abundance in Lily Lake.

A random sample of 59 bluegill were measured to assess size structure. The size structure of the Lily Lake population is above average for this region with approximately 40.7% of the fish in our sample being ≥ 7 inches and 11.9% ≥ 8 inches.



Other Species

The species listed above were the focus of the 2016 survey, with surveys designed to best sample these individual species. During 2017, we will again conduct extensive fish surveys of Lily Lake with surveys designed to assess walleye, northern pike, yellow perch, black crappie and muskellunge. Upon completion of the 2017 survey, information will be available summarizing the entire Lily Lake fishery.

This report is interim only; data and findings should not be considered final.
For answers to questions about fisheries management activities and plans for Lily Lake contact:

Greg Matzke, Fisheries Biologist
Wisconsin Department of Natural Resources
(715) 528-4400 Ext: 122 Email: Gregory.Matzke@Wisconsin.gov